



PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/696,279

Filing Date: October 29, 2003

Applicant: Joseph D. Rainville

Group Art Unit: 1745

Examiner: Robert W. Hodge

Title: CENTRIFUGAL COMPRESSOR SURGE  
DETECTION USING A BI-DIRECTIONAL MFM IN A  
FUEL CELL SYSTEM

Attorney Docket: GP-303951

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Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PETITION FROM REQUIREMENT FOR RESTRICTION**

Sir:

Pursuant to 37 CFR §1.144, Applicant hereby petitions that the Requirement for Restriction mailed October 22, 2006, and made final in the Office Action mailed December 13, 2006, be reversed. Applicant believes that no fee is necessary for this Petition.

The Restriction Requirement requiring restriction between Group I, claims 1-14, drawn to a fuel cell system, classified in class 429, subclass 22, and Group II, claims 15-20, drawn to a method of eliminating a surge condition of the compressor, classified in class 429, subclass 13. Applicant elected Group I with traverse, and requested reconsideration in the Response to Restriction Requirement filed October 20, 2006.

Applicant submits that the Restriction Requirement is improper. Independent apparatus claim 1 includes a surge detection device, a compressor and a controller, where the controller receives a signal from the surge protection device indicating a compressor surge. Independent method claim 15 includes a method for detecting a surge condition of a compressor in a fuel cell module, including detecting a reverse air flow, i.e., surge, through the compressor.

Applicant submits that a proper search for independent claim 1 would necessarily overlap a proper search for independent claim 15, and vice versa. MPEP 808.02 states that the Examiner must explain why there is a serious burden on the Examiner if restriction is not required by showing one of a separate classification of the inventions, a separate status in the art when the inventions are classified together in a different field of search. Applicant submits that the Examiner has not shown a proper separate classification and a proper different field of search, and has not identified a separate status in the art.

In the restriction requirement, the Examiner states that the method for operating of independent claim 15 can be used for any fuel cell system that utilizes a compressor and not just a turbomachine compressor of the invention of Group I. Applicant responded stating that this analysis is improper because independent claim 1 of Group I does not state that the compressor is a turbo compressor, but can be any suitable compressor, such as those identified in dependent claim 3.

In response thereto, the Examiner stated that this argument was not persuasive because claim 15 does not positively recite a fuel cell module only the intended use of the compressor, and therefore the method does not even require that the compressor be for any specific system and can be used for a number of

different systems that require a compressor, such as compressing air into cylinders for scuba diving or even for fire fighters respirator systems.

Applicant submits that dependent claim 15 positively recites a method for detecting and eliminating a surge condition of a compressor in a fuel cell module. Further, dependent claim 17 positively recites a back pressure valve and a cathode exhaust line of the fuel cell module, and dependent claim 18 positively recites a bypass valve in a cathode exhaust line of the fuel cell module. Therefore, Applicant submits that the Examiner has not shown that the inventions of Group I and II are distinct.

Applicant submits that if the Restriction Requirement is held proper, then it is the PTO's position that independent claims 1 and 15 are patentably distinct, as identified in MPEP 806, where it states that where Restriction is required by the Office, double patenting cannot be held, and thus, it is imperative the requirement should never be made where related inventions as claimed are not distinct. MPEP 802.001, II, states "wherein at least one invention is PATENTABLE (novel and unobvious) OVER THE OTHER . . ." Emphasis in original.

For the reasons given above, it is respectfully requested that the Restriction Requirement be withdrawn.

Respectfully submitted,

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